2022
The Diversity of Oregon's Licensed Health Care Workforce

Based on data collected from 2014 through January 2022

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To Be Published January 2023
Oregon Health Authority
Office of Health Analytics

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Oregon Health

Health Care Workforce
Reporting Program

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Contents

About the data in this report:

Oregon's Health Care Workforce Reporting Program (HWRP) was created in 2009. As directed by Oregon Revised Statute 676.410, the HWRP collects and tabulates information from licensees of 17 health licensing boards upon renewal.

Some of the data in this report was collected during the COVID-19 pandemic of 2020-2022. At this time, it is unclear how the pandemic impacted the composition of the licensed health care workforce supply in Oregon.

This report begins the reporting of HWRP data using the REALD data collection and reporting standards for Race/Ethnicity and Disability. Caution should be used when interpreting this new data, especially in relation to previous versions of this report.

Executive Summary

Report Objectives

This report explores the race, ethnicity, gender, language, and disability makeup of Oregon's licensed health care professionals compared with that of the state. This report aims to answer the following questions:

- What is the racial/ethnic composition of Oregon's licensed health care workforce?
- How is the workforce composition changing over time?
- How culturally and linguistically representative is the workforce of the population that it serves?
- What portion of the workforce report living with some form of disability?

Why is workforce diversity important?

Across the country, health access and outcomes remain inequitable by race/ethnicity, gender, disability, language and other characteristics.[1] For instance, life expectancy, infant mortality and preterm birth rates, as well as prevalence of obesity and hypertension all differ by race and ethnicity. Additionally, there are differences in access to care between racial and ethnic groups. People of color are less likely to have insurance coverage and receive needed dental care. Individuals with physical disabilities or cognitive limitations have higher prevalence of chronic conditions compared with individuals with no disabilities,[2] and patients with limited English proficiency are more likely to experience adverse events in six US hospitals (including higher levels of physical harm) compared with patients who speak English.[3] The COVID-19 pandemic had a disproportionate impact on communities of color, tribal communities, and other historically underrepresented communities, and many historical inequities widened during that time.

Evidence suggests that greater diversity in the health care workforce advances cultural competency and increases access to high-quality health care.[4,5] Accordingly, increasing the proportion of underrepresented US racial and ethnic groups among health care professionals in the workforce may improve quality of care.

Given these health inequities, it is important to foster a workforce that is culturally and linguistically representative of the communities it serves. This report aims to examine the current makeup of the workforce in Oregon and the extent to which it is representative of Oregon's population.

OHA's definition of health equity states: "Oregon will have established a health system that creates health equity when all people can reach their full health potential and well-being and are not disadvantaged by their race, ethnicity, language, disability, gender, gender identity, sexual orientation, social class, intersections among these communities or identities, or other socially determined circumstances.

Achieving health equity requires the ongoing collaboration of all regions and sectors of the state, including tribal governments to address:

- The equitable distribution or redistributing of resources and power; and
- Recognizing, reconciling and rectifying historical and contemporary injustices."

This definition recognizes that people are often differentially impacted by the health system depending on their race and ethnicity, languages spoken and/or disability status.

Key Insights

♦ Overall, Oregon's licensed health care workforce is less racially and ethnically diverse than the population being served (Figure 2). White and Asian persons are overrepresented in the workforce. Latino/a/x, American Indian/Alaska Native, Black/African American, and Native Hawaiian/Pacific Islander persons are all underrepresented. However, Latino/a/x licensees are sometimes overrepresented in fields with fewer barriers to entry (e.g. certified nursing assistants, chiropractic assistants) (Table 1).

♦ Women are overrepresented in most professions, while men tend to be overrepresented in fields requiring more advanced training (e.g. dentistry and medicine) (Table 1).

♦ Previous iterations of this report showed that the racial and ethnic makeup of many occupations was changing, and most occupations appeared to be growing more diverse over time. Between 2016 and 2020, the percentage of White providers decreased from 83.4 to 80.3 percent (a change of 3.1 percent), while the percentage of providers from most other racial/ethnic groups increased. Over the same time period the White population of Oregon decreased by 2.1 percent (from by 77.6 to 76.0 percent), suggesting that the differences between the workforce and the state's demographics are decreasing. We examine the current state of diversity across occupations in the licensed health care workforce, but because of the change in collection and reporting using REALD standards, drawing conclusions on trends in the workforce is not possible.

♦ It was found that 19.2 percent of Oregon's health care professionals reported speaking languages other than English; of that group, 58.0 percent report advanced proficiency or being a native speaker of another language and 46.4 percent report using a language other than English with patients (Figure 6). Spanish is the most reported language spoken other than English among the healthcare workforce as well as among the Oregon population. While 9.6 percent of the workforce reports speaking Spanish, only 4.7 percent report advanced proficiency or being a native speaker of Spanish. Of the Spanish-speaking workforce, 80.4 percent report using Spanish with patients while providing care.

♦ Similar patterns were seen in the composition of specialty providers (**Figure 9**). People of color, except for providers of Asian descent, tend to be underrepresented relative to Oregon's population among primary care providers and oral health care professionals. Among behavioral health professionals, Hispanic and non-White health care providers are underrepresented. White health care providers are overrepresented in all of these groups, but this is especially pronounced among behavioral health providers, where people of color comprise 13 percent of licensed behavioral health providers, compared with 24 percent of the population (**Figure 9**).

What is REALD?

REALD is an effort to increase and standardize Race, Ethnicity, Language, and Disability (REALD) data collection across the Oregon Department of Human Services (ODHS) and the Oregon Health Authority (OHA). REALD was advanced through the passage of House Bill 2134 passed by the Oregon legislature in 2013.

Data collection for HWRP before 2021 included only the five racial groups in accordance with guidelines set by the US Office of Management and Budget. However, data at this level may not capture racial and ethnic identity adequately to determine whether the workforce is representative of the communities that it serves.

HWRP updated demographic survey questions in January of 2021 to reflect the REALD standards. **This allows health care professionals licensed in Oregon to report their demographic identities with more granularity, if they so choose, while also supporting state planning efforts to equitably promote a diverse and culturally responsive workforce for communities across the State.**

The statutory authority for these rules is codified in the Oregon Revised Statutes (ORS 413.042 and 413.161). In 2014 the administrative rules detailing the data collection standards were completed (OARs 943-070-0000 thru 943-070-0070). Additional information, including an implementation guide, is available on the REALD website.

Findings

Race, ethnicity, and gender

This report compares race/ethnicity and gender data from the overall Oregon population to Oregon's licensed health care workforce in order to understand how representative the health care workforce is of the population it serves. The REALD system of collecting and reporting race/ethnicity data pose novel challenges for presenting trend data for both the overall Oregon population and Oregon's licensed health care workforce. Implementing REALD procedures allows for the collection and reporting of both race/ethnicity "parent" groups and the more granular subgroups. For a more detailed description of REALD procedures and a table displaying how race/ethnicity "parent" and subgroups relate, please see pg. 18 in the methods section of this report.

It is important to note that because REALD data only exists for the most recent data collection cycle, it is not possible compare the data directly to that of previous cycles.

In terms of data about Oregon's licensed health care workforce, the transition to REALD collection and reporting is not complete for the data collection cycle represented in this report. This report's collection period spans January 2020 to January 2022, and HWRP fully implemented REALD standards in January 2021. Since data collection is based on renewal cycles of licensed health care providers, and because the renewal cycles for licensing boards and license types vary, not all licensee types have full REALD data in this report. Fortunately, many licensing boards collect data annually, so they have REALD data based on collection from January 2021 to January 2022. However, some licensed occupations only renew every other year. If their collection falls on even-numbered years, we will not have REALD data until the 2022-2024 report. This is the case for acupuncturists, occupational therapists, and pharmacy technicians. Another set of occupations renew over a two year period, with approximately half of their licensees renewing every year. This is true for dentists and dental hygienists, social workers, psychologists, massage therapists, radiographers, and nurses. Overall, 60.5 percent of HWRP data for this cycle is REALD compliant. This means that for some analyses, we can only report aggregate-level "parent" data. For other applications, we can report granular subgroup data, in part or whole, depending on the occupation.
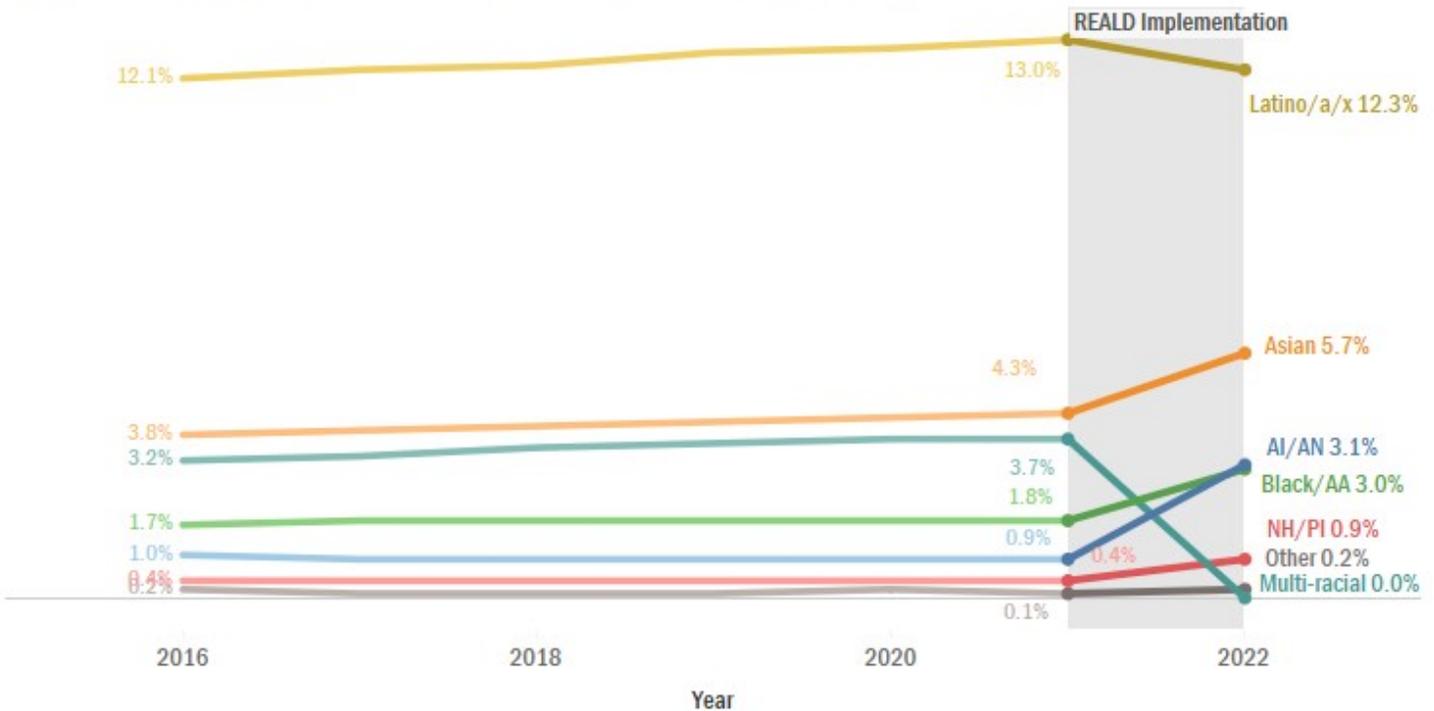
The data representing Oregon's overall population presents additional challenges. **Figure 1** demonstrates how moving to the REALD system impacted how the racial/ethnic composition of Oregon's overall population is **reported**. This is **not** directly indicative of a change in the underlying population. Rather, some individuals who would have been categorized in one racial/ethnic category using the previous method are now categorized differently. In the 2016-2021 period, we utilized American Community Survey (ACS) Public Use Microdata Sample (PUMS) 5-year data for estimating the Oregon population. ACS PUMS contains information on a variety of demographic statistics, but in the case of this report, we have used the data for race, ethnicity, and gender.

For the 2022 cycle, we use data provided by Oregon Health Authority's Office of Equity and Inclusion that imputes REALD race and ethnicity category values from the data contained in the ACS PUMS statistical file. Additional data points in the ACS PUMS data set such as language, ancestry, and place of birth are used to impute values that compare to the REALD category values for both parent and granular level data.[11]

[Read more about REALD implementation in their guide.](#)

One notable change is that it is possible to reallocate individuals who were previously reported in the Multi-racial category into component parts of their racial identity, and to then assign them to a primary race category. REALD

Figure 1: Changing measures of the racial/ethnic composition of Oregon's population

Note: AA = African American, AI/AN = American Indian or Alaska Native, NH/PI = Native Hawaiian or Pacific Islander

implementation recommends that "you could use a 'most identify and rarest group first' method where you apply an algorithm to assign those with multiple identities to one primary race"[11] and this is performed here to report the imputed data with the highest level of representation for the rarest race categories. Examples given include coding someone who would identify as both Western European and African American as African American because African American is the more rare segment in the overall Oregon population.
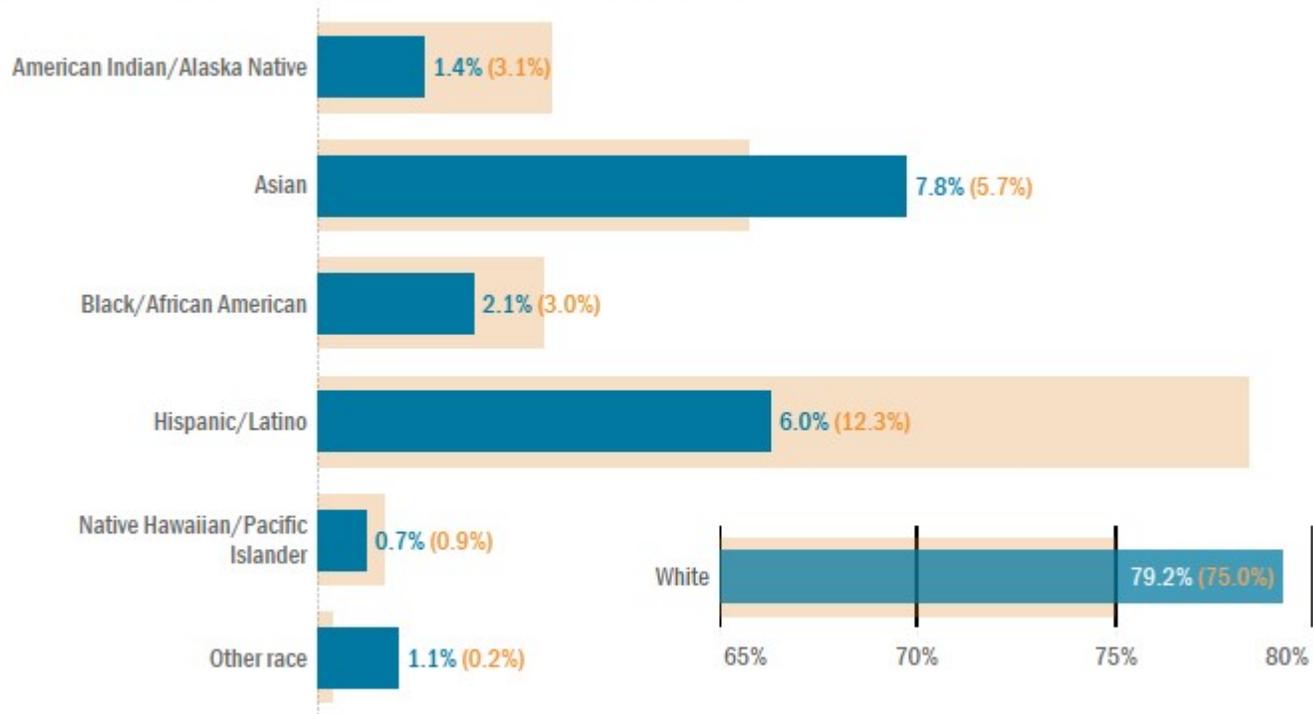
Figure 2: One of the core functions of this report is to compare the composition of the licensed health care workforce to the overall population in Oregon. Figure 2 uses the REALD data collected by the Workforce survey and the imputed REALD values from the ACS PUMS data to create this comparison.

Overall, Oregon's licensed healthcare workforce in 2022 is less racially and ethnically diverse than the population being served. White and Asian persons are overrepresented in the workforce. Other people of color are underrepresented, with the largest difference seen in the Latino/a/x population, which make up only 6 percent of the licensed health care workforce compared with 12.3 percent of the Oregon population. It is important to note that this general characterization across the whole workforce varies between specific occupations, which we examine in the next table.

The Workforce survey gives respondents the option of affirmatively selecting 'multi-racial,' or to select a specific primary race they identify with. Of our survey respondents, 4.2 percent selected that they do not identify with a primary race or that they consider themselves multi– or biracial. We have reported them using the rarest race methodology here to reassign them into the single category that will show the greatest degree of representation and be directly comparable to the imputed ACS PUMS data.

Figure 2a: We now have the capacity to conduct some comparisons between subcategories within the larger race

Figure 2: Health care workforce compared with Oregon population (2022)

Note: Providers with missing data were excluded from the analysis. Some Workforce records are missing race and ethnicity data because licensees declined to report race or ethnicity. Middle-Eastern and White combined for this presentation. Participants choosing multi-race recategorized using rarest race methodology.
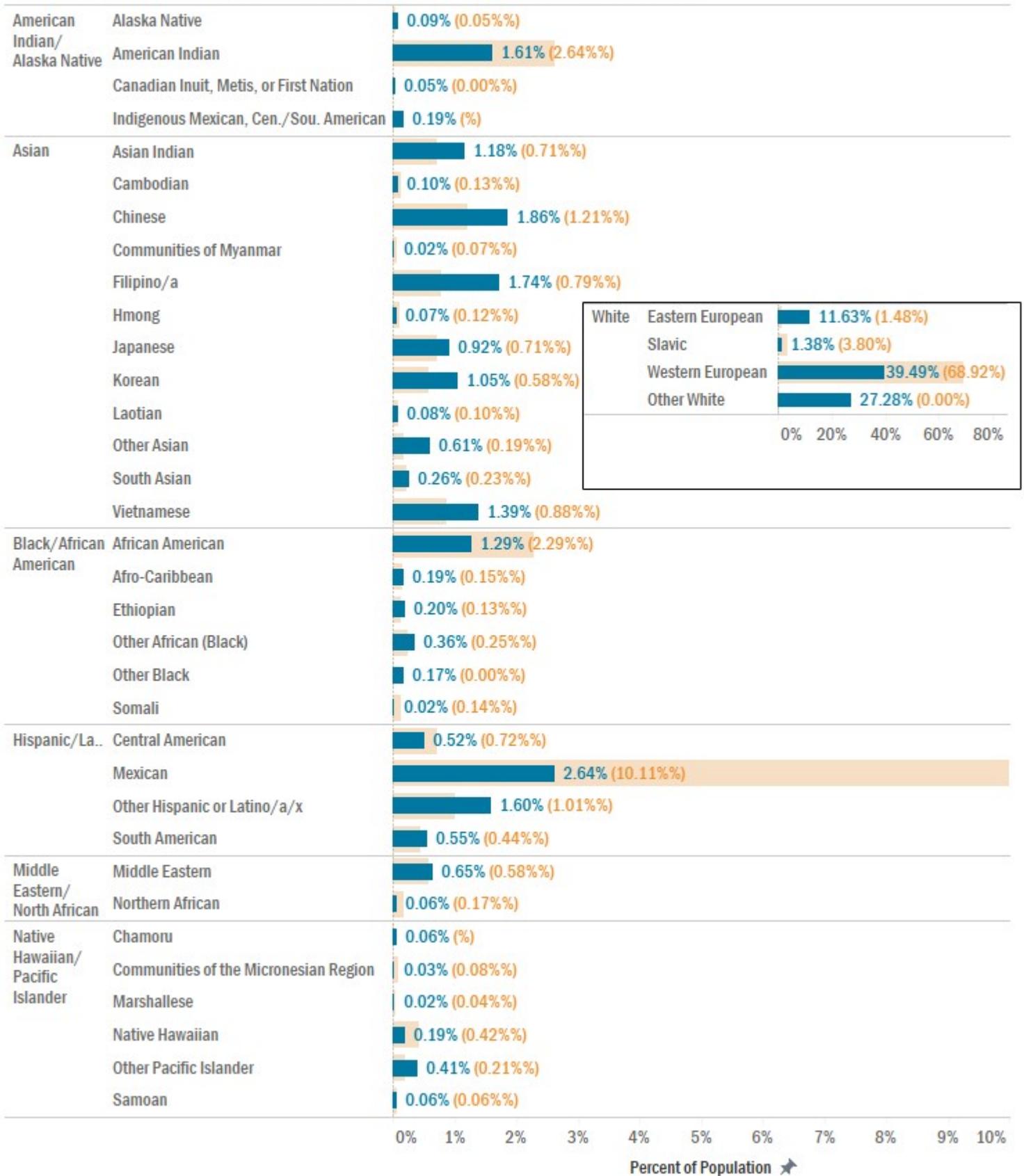
parent categories, and we show that for non-White licensees here. These comparisons reveal differences within larger race parent groups. For example, while Latino/a/x licensees (6.0 percent) are overall underrepresented compared to the Oregon population (12.3 percent), this is especially stark for those who identify as Mexican in origin (2.6 percent of workforce compared to 10.1 percent of Oregon population), while other subgroups such as South American have nearly one to one representation and 'other Latino/a/x' have slight overrepresentation (1.6 percent of workforce vs. 1.0 percent of Oregon population).

Because of the previously noted status of HWRP only being partially complete in transitioning to REALD implementation, caution is recommended in interpretation of these race/ethnicity subgroup statistics. Since HWRP is only roughly 60 percent transitioned to REALD, it is possible that the remaining pool of licensed health care workers will have a different composition than the pool represented here. For example, certified pharmacy technicians are not represented in this granular data because their licensing cycle fell before our REALD implementation. Pharmacy technicians overall have higher representation of Latino/a/x workers (10.4 percent) than most occupations (6.0 percent). It is possible that the future inclusion of the pharmacy technician workforce would shift the distributions of Mexican/South American/Central American/Other Latino/a/x workers because of different characteristics of workers in that occupation.

Table 1 Shows the breakdowns of parent race categories within each occupation. While we only have subgroup data for a portion of licensed workers, we have "parent"-level data for all occupations. The overall distribution of healthcare workers shows overrepresentation of White and Asian workers compared to the Oregon population, while most non-White races are underrepresented.

This pattern is not universal across occupations. Asian workers are especially overrepresented in some occupations, with dentists, physicians, pharmacists and optometrists all exceeding a 3:1 ratio compared to the baseline population.

Figure 2a: Health care workforce (2022) compared with Oregon population (granular)

Race/Ethnicity Group	Subgroup	Workforce % (Population %)
American Indian/ Alaska Native	Alaska Native	0.09% (0.05%%)
	American Indian	1.61% (2.64%%)
	Canadian Inuit, Metis, or First Nation	0.05% (0.00%%)
	Indigenous Mexican, Cen./Sou. American	0.19% (%)
Asian	Asian Indian	1.18% (0.71%%)
	Cambodian	0.10% (0.13%%)
	Chinese	1.86% (1.21%%)
	Communities of Myanmar	0.02% (0.07%%)
	Filipino/a	1.74% (0.79%%)
	Hmong	0.07% (0.12%%)
	Japanese	0.92% (0.71%%)
	Korean	1.05% (0.58%%)
	Laotian	0.08% (0.10%%)
	Other Asian	0.61% (0.19%%)
	South Asian	0.26% (0.23%%)
	Vietnamese	1.39% (0.88%%)
Black/African American	African American	1.29% (2.29%%)
	Afro-Caribbean	0.19% (0.15%%)
	Ethiopian	0.20% (0.13%%)
	Other African (Black)	0.36% (0.25%%)
	Other Black	0.17% (0.00%%)
	Somali	0.02% (0.14%%)
Hispanic/La..	Central American	0.52% (0.72%%)
	Mexican	2.64% (10.11%%)
	Other Hispanic or Latino/a/x	1.60% (1.01%%)
	South American	0.55% (0.44%%)
Middle Eastern/ North African	Middle Eastern	0.65% (0.58%%)
	Northern African	0.06% (0.17%%)
Native Hawaiian/ Pacific Islander	Chamoru	0.06% (%)
	Communities of the Micronesian Region	0.03% (0.08%%)
	Marshallese	0.02% (0.04%%)
	Native Hawaiian	0.19% (0.42%%)
	Other Pacific Islander	0.41% (0.21%%)
	Samoan	0.06% (0.06%%)

Inset:

White	Eastern European	11.63% (1.48%)
	Slavic	1.38% (3.80%)
	Western European	39.49% (68.92%)
	Other White	27.28% (0.00%)

Percent of Population

Note: Providers with missing data were excluded from the analysis. Some Workforce records are missing race and ethnicity data because licensees declined to report race or ethnicity. Individuals reporting multiple races are recategorized using rarest race methodlogy.

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Table 1: Race, Ethnicity, and Gender Distribution: 2022 Workforce compared with Population

Comparison to state distribution

■ Similar to state ■ Below state ■ Above state ☐ No representation

		AI/AN	Asian	Black /AA	Latino /a/x	NH/PI	Other race	White		Female	Male
Oregon		3.1%	5.7%	3.0%	12.3%	0.9%	0.2%	75.0%		50.4%	49.6%
Chiropractic	Chiropractic assistants	3.1%	6.1%	1.1%	17.7%	0.9%	0.8%	70.4%		83.4%	13.2%
	Chiropractic physicians	2.1%	7.2%	0.5%	3.1%	0.6%	0.8%	85.7%		30.3%	64.5%
Counselors/Therapists	Counselors & therapists	2.9%	2.8%	1.6%	4.8%	0.7%	0.9%	86.3%		75.6%	20.0%
Dentistry	Dental hygienists	1.9%	7.0%	0.4%	5.9%	0.5%	0.9%	83.4%		93.9%	3.0%
	Dentists	0.6%	18.2%	1.0%	3.7%	0.8%	1.0%	74.7%		29.8%	66.5%
Dietetics	Licensed dietitians	1.9%	6.6%	0.2%	2.8%	0.2%	0.0%	88.3%		92.2%	4.6%
Massage therapy	Licensed massage therapists	2.1%	4.6%	1.0%	5.0%	0.6%	1.2%	85.6%		78.6%	15.4%
Medical	Acupuncturists	0.1%	11.0%	0.2%	3.4%	0.2%	1.8%	83.5%		71.6%	28.2%
	Physician assistants	0.4%	5.6%	1.3%	2.6%	0.1%	2.2%	87.9%		65.2%	34.7%
	Physicians	0.2%	17.4%	1.1%	2.1%	0.1%	3.2%	75.9%		41.1%	58.9%
	Podiatrists	0.0%	12.3%	0.9%	0.0%	0.0%	1.8%	85.1%		22.5%	77.5%
Medical imaging	Medical imaging technologists	1.2%	3.9%	0.8%	5.7%	0.7%	1.0%	86.7%		62.4%	32.7%
Naturopathy	Naturopathic physicians	2.9%	6.3%	0.9%	4.6%	0.8%	0.8%	83.8%		73.8%	20.8%
Nursing	Certified nursing assistants	2.0%	6.9%	7.5%	18.1%	1.4%	1.3%	62.6%		83.7%	14.3%
	Certified registered nurse anesthetists	0.6%	7.0%	0.6%	3.8%	0.0%	1.5%	86.6%		47.2%	46.3%
	Clinical nurse specialists	0.0%	4.2%	0.0%	1.1%	0.0%	1.1%	93.7%		91.7%	4.6%
	Licensed practical nurses	1.9%	5.5%	5.7%	9.3%	0.8%	0.9%	75.9%		84.9%	12.8%
	Nurse practitioners	1.3%	4.7%	2.2%	4.2%	0.3%	0.7%	86.6%		84.8%	12.6%
	Registered nurses	1.4%	5.9%	1.5%	4.8%	0.6%	0.7%	85.0%		83.7%	13.5%
Occupational therapy	Occupational therapists	0.2%	5.3%	0.5%	3.1%	0.3%	0.7%	89.9%		85.9%	12.6%
	Occupational therapy assistants	0.0%	2.9%	1.1%	4.3%	0.4%	0.7%	90.6%		88.1%	10.0%
Optometry	Optometrists	1.1%	17.8%	0.2%	2.0%	0.6%	0.6%	77.7%		45.5%	49.6%
Pharmacy	Certified pharmacy technicians	1.0%	8.6%	1.4%	10.4%	1.0%	0.5%	77.1%		77.4%	19.3%
	Pharmacists	1.4%	26.5%	2.0%	2.7%	1.1%	1.0%	65.3%		56.7%	39.0%
Physical therapy	Physical therapists	1.2%	9.2%	0.7%	3.2%	0.7%	0.4%	84.7%		62.5%	34.9%
	Physical therapy assistants	1.3%	3.2%	1.1%	4.6%	0.3%	0.4%	89.1%		66.5%	29.1%
Psychology	Psychologists	1.3%	5.4%	1.3%	4.9%	0.3%	0.9%	85.8%		62.7%	34.2%
Respiratory therapy and polysomnography	Polysomnographic technologists	3.4%	4.5%	3.4%	5.6%	0.0%	1.1%	82.0%		48.0%	46.7%
	Respiratory therapists	3.3%	4.7%	2.6%	7.1%	1.5%	1.8%	79.0%		59.6%	35.8%
Social work	Clinical social work associates	3.4%	6.0%	7.5%	11.1%	0.8%	1.5%	69.7%		78.1%	16.6%
	Licensed clinical social workers	1.7%	2.6%	1.8%	4.1%	0.4%	0.8%	88.5%		78.6%	18.3%
	Non-clinical social workers	0.8%	4.1%	0.8%	7.4%	1.6%	0.8%	84.4%		83.0%	14.1%
Speech-language pathology and audiology	Audiologists	0.0%	8.0%	0.5%	2.1%	0.0%	0.0%	89.3%		72.5%	22.7%
	Speech-language pathologists	1.7%	3.7%	0.9%	4.4%	0.6%	0.8%	87.8%		88.9%	7.5%
	Speech-language pathology assistants	2.7%	3.4%	0.7%	11.0%	0.0%	0.0%	82.2%		94.4%	3.3%
Grand Total		1.4%	7.9%	2.1%	6.1%	0.7%	1.1%	80.7%		73.1%	24.1%

Note: Data is preliminary and still under review as of January, 2023. Providers with missing data were excluded from the analysis. Some Workforce records are missing race and ethnicity data because licensees declined to report race or ethnicity. Individuals reporting multiple races are recategorized using rarest race methodology. AA = African American, AI/AN = American Indian or Alaska Native, NH/PI = Native Hawaiian or Pacific Islander

In contrast, Asians are underrepresented in other areas like social work, counseling, medical imaging, and speech and language pathology.

We see different patterns for some underrepresented groups. Latino/a/x workers are overrepresented in areas like chiropractic assistants and certified nursing assistants, while rates for physicians, podiatrists, dentists and pharmacists are lower than the average for all occupations. Patterns of underrepresentation of non-White, non-Asian workers in fields with highest educational barriers to entry are observable in this data.

Multi-racial workers are reported here based on answers given to the HWRP survey, but since the baseline data for Oregon does not use this category, their 'overrepresentation' here should be interpreted differently than other groups.

Table 1 also shows the breakdown of gender by occupation as compared with the population. (Note: The percentages omit those who declined to answer, 2.4%, and do not show the percent that preferred to self-describe, 0.4%). Women are overrepresented in most professions, while men tend to be overrepresented in fields requiring more advanced training (e.g. dentistry and medicine).

Of those choosing to self-describe (0.4%, n=471) the frequently reported self-descriptions included: non-binary (45.7%), transgender (7.2%), genderqueer (5.3%), and genderfluid (4.3%).
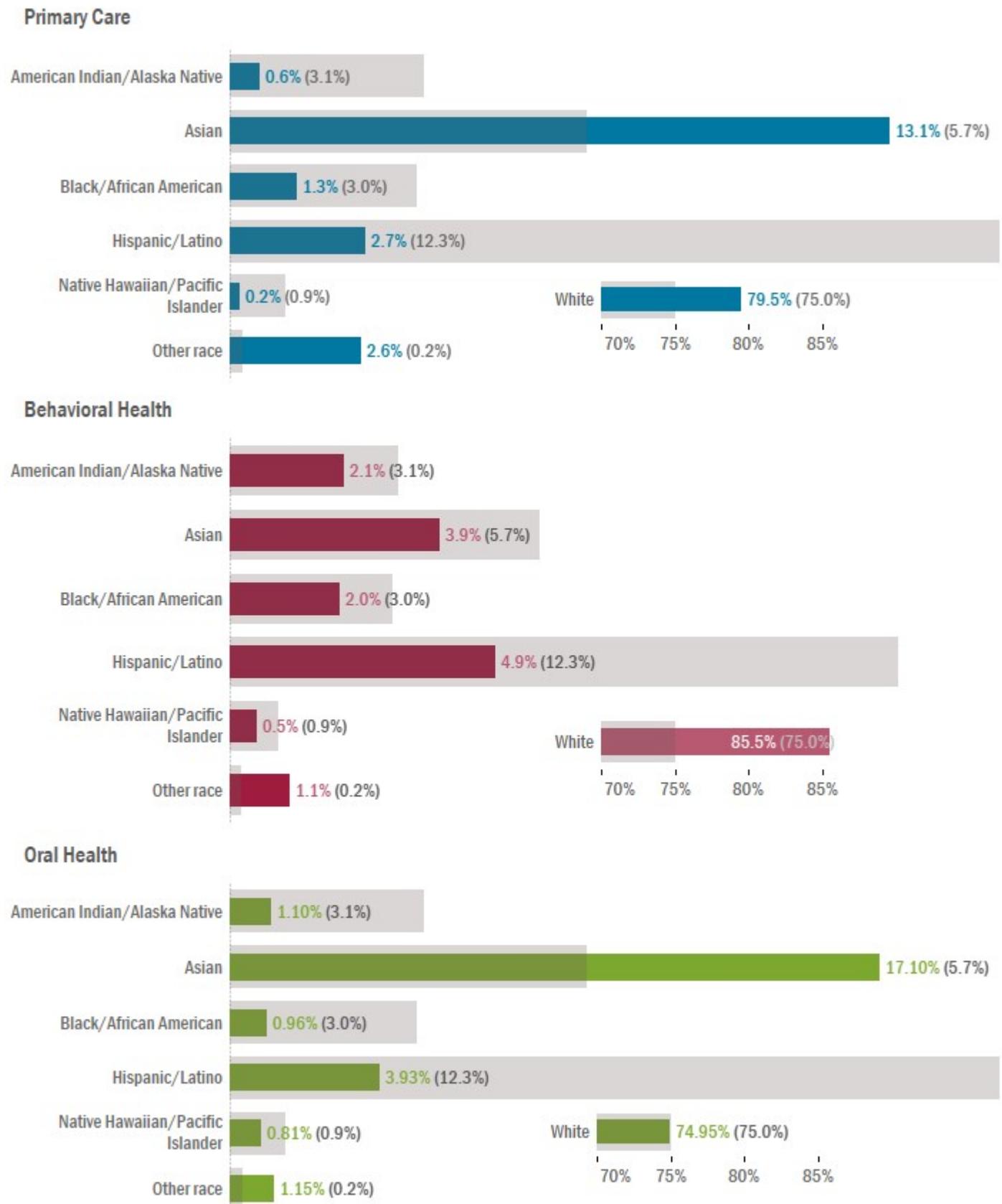
Race/Ethnicity Distribution within Specialty Groups

Figure 2b shows the racial and ethnic distribution of Oregon's primary care, behavioral health, and oral health workforce in 2022 compared with Oregon's population. White health care providers are overrepresented in all of these groups.

Primary care providers (PCPs), including nurse practitioners, physicians, physician assistants, and naturopathic physicians, makeup approximately 6.0 percent of the health care workforce. Most people of color tend to be underrepresented among PCPs, except for providers of Asian descent.

A similar pattern is seen among oral health care professionals where Asian dentists are overrepresented relative to Oregon's population, while other minority races are underrepresented.

Behavioral health care providers, including psychiatric nurse practitioners, physicians and physician assistants, psychologist examiners, licensed professional counselors and therapists, and licensed clinical social workers, makeup approximately 8.4 percent of the health care workforce. Among all behavioral health professionals, People of color health care providers are underrepresented.

Figure 2b: Specialty workforce groups compared with population (2022)

Primary Care

- American Indian/Alaska Native: 0.6% (3.1%)
- Asian: 13.1% (5.7%)
- Black/African American: 1.3% (3.0%)
- Hispanic/Latino: 2.7% (12.3%)
- Native Hawaiian/Pacific Islander: 0.2% (0.9%)
- White: 79.5% (75.0%)
- Other race: 2.6% (0.2%)

Behavioral Health

- American Indian/Alaska Native: 2.1% (3.1%)
- Asian: 3.9% (5.7%)
- Black/African American: 2.0% (3.0%)
- Hispanic/Latino: 4.9% (12.3%)
- Native Hawaiian/Pacific Islander: 0.5% (0.9%)
- White: 85.5% (75.0%)
- Other race: 1.1% (0.2%)

Oral Health

- American Indian/Alaska Native: 1.10% (3.1%)
- Asian: 17.10% (5.7%)
- Black/African American: 0.96% (3.0%)
- Hispanic/Latino: 3.93% (12.3%)
- Native Hawaiian/Pacific Islander: 0.81% (0.9%)
- White: 74.95% (75.0%)
- Other race: 1.15% (0.2%)

Note: Providers with missing data were excluded from the analysis. Some Workforce records are missing race and ethnicity data because licensees declined to report race or ethnicity. Middle-Eastern and White combined for this presentation. Participants choosing multi-race recategorized using rarest race methodology.

Workforce Changes Over Time

Previous versions of this report have shown year-over-year changes in the racial/ethnic composition of Oregon's health care workforce. Because of the introduction of the REALD data collection and reporting standards, there is discontinuity between this cycle and previous cycles of data, and comparing data accurately year-over-year is not possible.

As a replacement, HWRP chose to examine the age cohorts across the healthcare workforce. This allows us to draw some predictive power about the future of the workforce, and to have some measure of the success of projects to bring more people of color into the pipeline for health care professions.

Figure 3 shows the age and race/ethnicity structure of the health care workforce in 2022. It is presented in two segments. The contents on the left side of the figure show the proportion of age cohorts in the workforce within the parent race/ethnicity groups. The right side shows the current proportion of each race/ethnicity group in the composition of the total workforce.
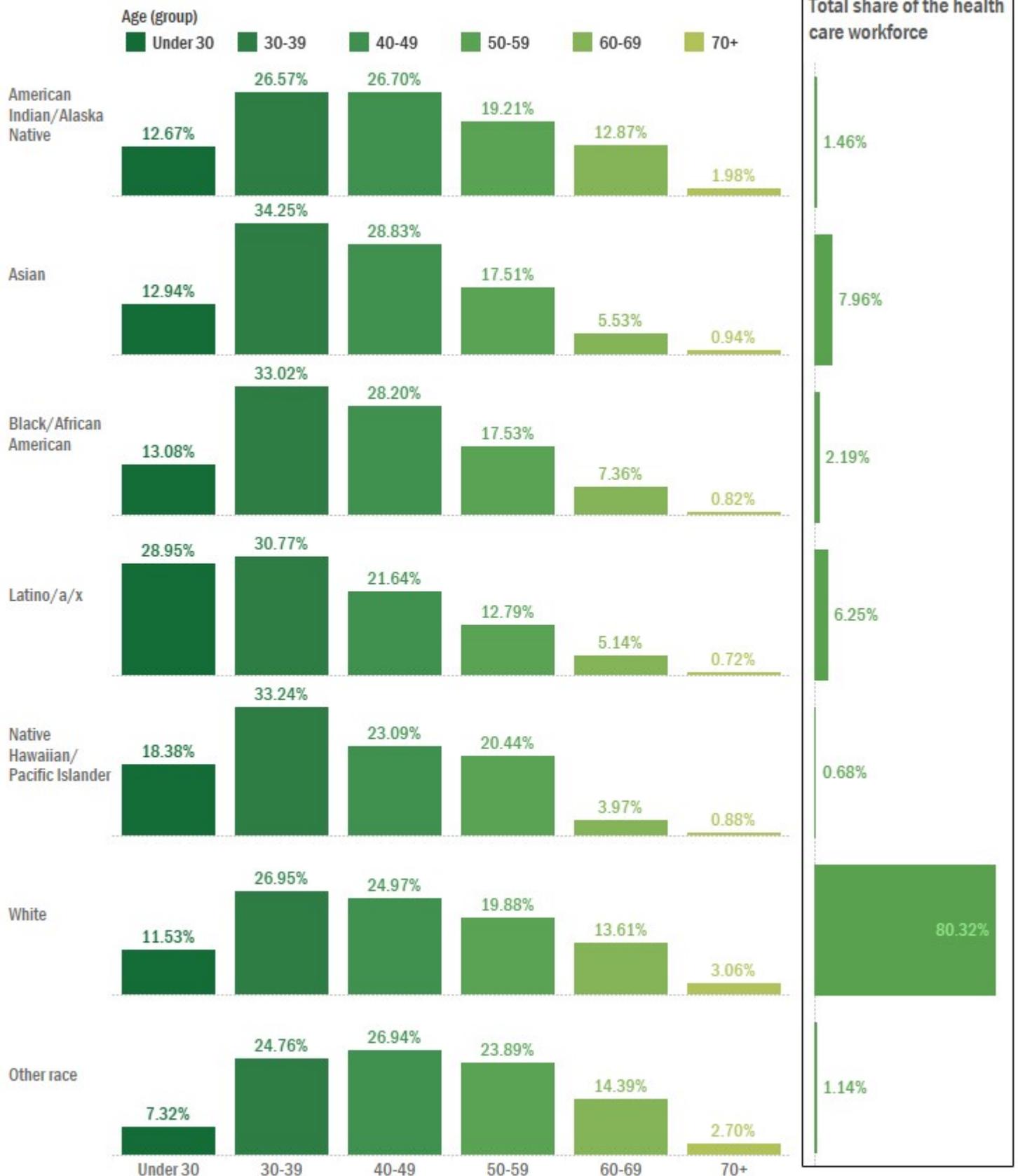
There are a variety of things to possibly take away from this figure. We can use it to get some idea of whether a race/ethnicity group is growing demographically or aging out of the workforce based on the weighting of their age cohorts toward the younger or older ends of the spectrum.

Aging cohorts: White and Other Race persons show a similar pattern. They each have a larger than average share of workers in the 60-69 (12.2 percent avg) and 70+ (2.6 percent avg) brackets. They also have lower than average shares in the under 30 (12.8 percent avg) and 30-39 (27.9 percent avg) brackets. If the current workforce is retained in equal measure across race/ethnicity lines, we would expect that over time the proportion of both White and Other Race workers would decline as this portion of the workforce chooses to retire.

Growing cohorts: On the other end of the spectrum, we have some cohorts that show potential for growth over time. Asian, Black/African American, Latino/a/x and Native Hawaiian/Pacific Islander workers all show the opposite pattern of the aging cohorts. In these cases, the Under 30 and 30-39 cohorts are higher proportions than the average in the workforce, and their 60-69 and 70+ cohorts are much lower. If it is maintained, this trend in growth for their younger workforce should increase their proportional representation in the workforce over time.

The total share of each race/ethnicity category is shown on the right. This is included to give a sense of how changes in each category over time fit into the overall picture. For example, while workers in the White category are showing the potential for decline as a proportion of the workforce based on their age cohort balance, they currently make up 80.3 percent of the workforce in this figure. The Oregon average for White persons as a share of the population is 75.0 percent, so that category can decline considerably before being underrepresented in proportion to the population.
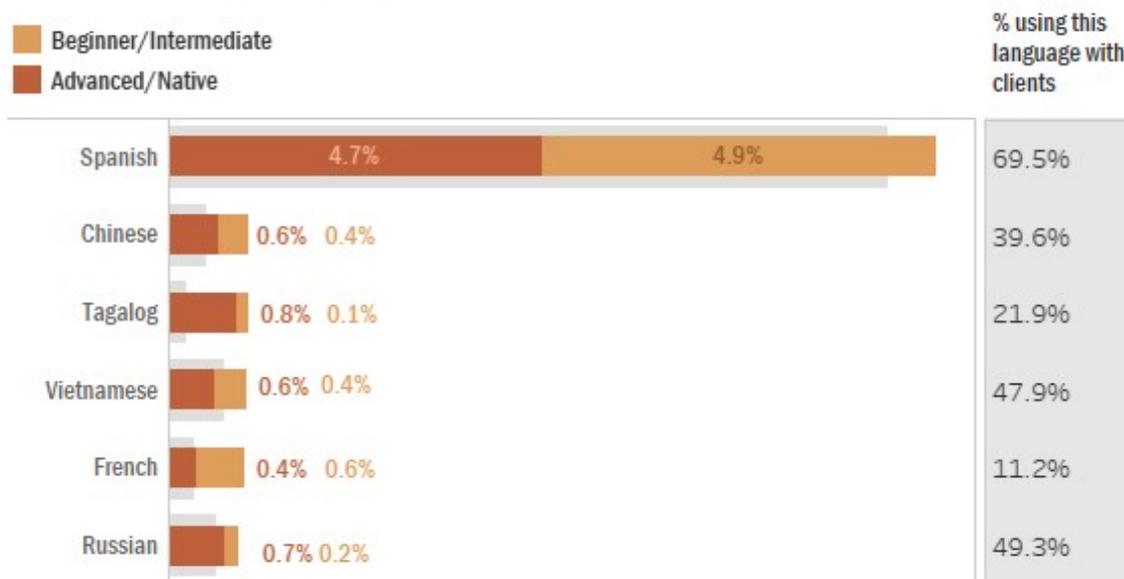
Figure 3: Age structure of the health care workforce by race/ethnicity (2022)

Age (group)
- Under 30
- 30-39
- 40-49
- 50-59
- 60-69
- 70+

American Indian/Alaska Native
- Under 30: 12.67%
- 30-39: 26.57%
- 40-49: 26.70%
- 50-59: 19.21%
- 60-69: 12.87%
- 70+: 1.98%

Asian
- Under 30: 12.94%
- 30-39: 34.25%
- 40-49: 28.83%
- 50-59: 17.51%
- 60-69: 5.53%
- 70+: 0.94%

Black/African American
- Under 30: 13.08%
- 30-39: 33.02%
- 40-49: 28.20%
- 50-59: 17.53%
- 60-69: 7.36%
- 70+: 0.82%

Latino/a/x
- Under 30: 28.95%
- 30-39: 30.77%
- 40-49: 21.64%
- 50-59: 12.79%
- 60-69: 5.14%
- 70+: 0.72%

Native Hawaiian/Pacific Islander
- Under 30: 18.38%
- 30-39: 33.24%
- 40-49: 23.09%
- 50-59: 20.44%
- 60-69: 3.97%
- 70+: 0.88%

White
- Under 30: 11.53%
- 30-39: 26.95%
- 40-49: 24.97%
- 50-59: 19.88%
- 60-69: 13.61%
- 70+: 3.06%

Other race
- Under 30: 7.32%
- 30-39: 24.76%
- 40-49: 26.94%
- 50-59: 23.89%
- 60-69: 14.39%
- 70+: 2.70%

Total share of the health care workforce
- American Indian/Alaska Native: 1.46%
- Asian: 7.96%
- Black/African American: 2.19%
- Latino/a/x: 6.25%
- Native Hawaiian/Pacific Islander: 0.68%
- White: 80.32%
- Other race: 1.14%

Note: Providers with missing data were excluded from the analysis. Some Workforce records are missing race and ethnicity data because licensees declined to report race or ethnicity. Middle-Eastern and White combined for this presentation. Participants choosing multi-race recategorized using rarest race methodology.

Language Proficiency

Of Oregon's health care professionals, 19.2 percent report speaking languages other than English. Of that group, 58 percent report advanced proficiency or being a native speaker of another language and 46.4 percent report using a language other than English with patients (Figure 4). Spanish is the most frequently reported language spoken other than English among the healthcare workforce as well as among the Oregon population. While 9.6 percent of the workforce reports speaking Spanish, only 4.7 percent report advanced proficiency or being a native speaker of Spanish. Of the Spanish-speaking workforce, 69.5 percent report using Spanish with patients while providing care.

Figure 4: Top Languages Spoken by the Workforce
Workforce stratified by proficiency, compared to Oregon Population

Legend:
- Beginner/Intermediate
- Advanced/Native

% using this language with clients

Language	Advanced/Native	Beginner/Intermediate	% using this language with clients
Spanish	4.7%	4.9%	69.5%
Chinese	0.6%	0.4%	39.6%
Tagalog	0.8%	0.1%	21.9%
Vietnamese	0.6%	0.4%	47.9%
French	0.4%	0.6%	11.2%
Russian	0.7%	0.2%	49.3%

Note: Data is preliminary and still under review as of January, 2023. Chinese includes Mandarin and Cantonese.

The role of health care interpreters

There is no guarantee that a provider who speaks a particular language will be available when a non-English-speaking client needs one. Health care interpreters (HCI) help to fill the gaps. The use of language services, such as interpretation by qualified and certified HCIs, has been shown to improve cross-cultural communication, leading to increased compliance with recommended treatment plans, improved health care outcomes, and ultimately, reduction in health disparities.[9] Additionally, increased patient engagement as a result of this improved communication may lead to a reduction in health care cost.[10] Oregon's Health Care Interpreter program is based on Title VI of the federal Civil Rights Act and Oregon law (ORS 413.550). To comply with these laws, OAR 333-002-0000 was implemented to develop an HCI workforce and ensure the availability of quality health care interpretation for patients who are considered Limited English Proficient (LEP).

Certified and qualified interpreters must have formal training and experience and certified interpreters must pass national certification exams. As of October 2020, Oregon has 530 qualified and 173 certified health care interpreters. These numbers have increased from 257 and 91, respectively, since January 2017.

In 2021, the Health Care Workforce Reporting program carried out a pilot study of certified and/or qualified

Health Care Interpreters (HCIs) in Oregon. Of the 719 HCIs in Oregon, 149 completed the survey (response rate: 21.8 percent), with 94 percent of the respondents reporting that they were actively working in the field. Of the 149 respondents, 90 (60.4 percent) were qualified or certified as Spanish HCIs. The next most commonly reported language was American Sign Language (ASL), with 15 HCIs (10 percent of the sample) reporting being qualified or certified.

The clients served by the HCIs were concentrated in the tri-Counties metro area, with 57% of survey respondents reporting serving clients in Multnomah county. No HCLs in the survey sample reported serving clients in Clatsop, Wheeler, Grant, Lake, Harney, Union, Baker, and Malheur counties.

You can find the HWRP Health Care Interpreter Pilot Study here.

Disability

Starting in January of 2021, HWRP began administering a series of six disability-related questions with one optional follow-up each. All licensing boards participated in this addition with the exception of Oregon Medical Board (OMB). The following questions were added:

- Are you deaf or do you have serious difficulty hearing?

- Are you blind or do you have serious difficulty seeing, even when wearing glasses?

- Does a physical, mental, or emotional condition limit your activities in any way?

- Do you have serious difficulty walking or climbing stairs?

- Do you have difficulty dressing or bathing?

- Because of a physical, mental, or emotional condition, do you have serious difficulty doing errands alone such as visiting a doctor's office or shopping?

In the case of an affirmative answer to any of these questions, the licensee would be given a follow-up question "At what age did this condition begin?"

Figure 5 shows the findings from the first administration of these questions. As with the Race/Ethnicity question update, there is a significant portion of licensees who have not been asked these questions yet because of the renewal cycles particular to their board. A little less than 60 percent of the currently licensed healthcare workers in Oregon have answered these questions, and HWRP should approach 100 percent data collection for this measure by the next reporting cycle (excluding OMB).

The current overall rate of Oregon residents with disability is 14.8 percent, with 1.7 percent of residents having 2 or more disabilities[12]. The rate of disability within the licensed health care workforce is much lower, at 2.6 percent for a single disability, and 0.5 percent reporting more than one disability.

Rates of specific disability are shown in Figure 5. Rates are reported by specialty group, and it is notable that because of the exclusion of Oregon Medical Board, the Primary Care group should be interpreted cautiously. In current form, it is limited to nurse practitioners who specialize in family practice, geriatrics, pediatrics, internal medicine, or Obstetrics/Gynecology/women's health; and naturopathic physicians who specialize in family medicine, pediatrics, geriatrics or obstetrics.

Overall disability rates seem highest within Behavioral Health occupations, and the highest reported frequencies of disability are in conditions that limit activities, deafness or difficulty in hearing, and difficulty walking or climbing stairs.

Figure 5: Percentage and specialty area of licensed health care workers living with disability (2022)

Specialty Group

- ■ Primary Care
- ■ Behavioral Health
- ■ Oral Health
- ■ Other Occupations

Are you blind or do you have serious difficulty seeing, even when wearing glasses?

Behavioral Health	0.28%
Oral Health	0.07%
Other Occupations	0.23%

Are you deaf or do you have serious difficulty hearing?

Primary Care	0.29%
Behavioral Health	1.05%
Oral Health	0.73%
Other Occupations	0.74%

Does a physical, mental, or emotional condition limit your activities in any way?

Primary Care	1.49%
Behavioral Health	2.91%
Oral Health	0.73%
Other Occupations	2.07%

Do you have serious difficulty walking or climbing stairs?

Primary Care	0.78%
Behavioral Health	1.26%
Oral Health	0.22%
Other Occupations	0.82%

Do you have difficulty dressing or bathing?

Primary Care	0.29%
Behavioral Health	0.11%
Other Occupations	0.11%

Because of a physical, mental, or emotional condition, do you have serious difficulty doing errands alone such as visiting a doctor's office or shopping?

Primary Care	0.39%
Behavioral Health	0.15%
Other Occupations	0.26%

0.00%   0.50%   1.00%   1.50%   2.00%   2.50%

% of individuals living with disability 📌

Note: Providers with missing data were excluded from the analysis. Some licensing boards have partial or no data, based on their license renewal cycle. Oregon Medical Board did not collect disability-related data during this cycle.

Supplemental Material

The Health Care Workforce Reporting Program (HWRP)

The HWRP collaborates with 17 health regulatory licensing boards to collect, process, and analyze data for over 35 occupations to understand Oregon's health care workforce; inform public and private educational and workforce investments; and inform policy recommendations for the Governor's Office, legislative leadership and state agencies regarding Oregon's health care workforce (Oregon Revised Statute (ORS) 676.410; Oregon Administrative Rule (OAR) 409-026).

For more information about methodology and results, visit: https://www.oregon.gov/oha/hpa/analytics/Pages/Health-Care-Workforce-Reporting.aspx

Limitations

The HWRP collects data on occupations that are licensed in Oregon and covered by Oregon Revised Statute 676.410, so does not represent the entire health care workforce. The program does not currently collect data for many unlicensed health care professionals including traditional health workers, health care interpreters, qualified mental health professionals, addiction counselors, licensed professional counselor interns, lab scientists/technicians, medical assistants, ophthalmologist technicians, and more.

Participating Licensing Boards
Oregon Board of Chiropractic Examiners
Oregon Board of Dentistry
Oregon Board of Examiners for Speech-Language Pathology and Audiology
Oregon Board of Licensed Clinical Social Workers
Oregon Board of Licensed Dieticians
Oregon Board of Licensed Professional Counselors and Therapists
Oregon Board of Massage Therapists
Oregon Board of Medical Imaging
Oregon Board of Naturopathic Medicine
Oregon Board of Optometry
Oregon Board of Pharmacy
Oregon Board of Physical Therapy
Oregon Board of Psychology
Oregon Medical Board
Oregon Occupational Therapy Licensing Board
Oregon State Board of Nursing
Respiratory Therapist and Polysomnographic Technologist Licensing Board

Survey data comes only from renewing licensees, so this report assumes that new licensees would respond similarly to renewing licensees. There is a time lag in reporting, so estimates reflect a historical point in time. Length of participation in the HWRP varies by board, so reliable estimates over time vary by occupation. Data is collected for up to two practice locations, so data may not be accurate for health care professionals who have three or more practice locations or who have a mobile practice.

10.5 percent of the licensed workforce declined to provide race and ethnicity data. 2.2 percent declined to provide data on gender. Individuals with missing data are excluded from the charts in this report.

Methodology and definitions

Data sources for this report include workforce data from the Health Care Workforce Reporting Program (HWRP) from 2014 through the first quarter of 2022. HWRP collects workforce-related information directly from health care professionals via a survey embedded in the license renewal process. Health care professionals with an active license in each reporting year (January 2018, 2019, 2020, 2021, 2022; month of verification varied by occupation in 2016), were included in this report. Estimates are dependent on licensees who completed the survey. Each licensee can report workforce data for up to two practice locations. Please refer to the HWRP's General Methods documentation on the website for further details.

Population data come from five-year ACS estimates (data collected over 60-month period, 2016–2020), imputed

to represent REALD parent categories by the Office of Equity and Inclusion. These estimates are not as current as the one-year estimates, but the primary advantage of using multiyear estimates is the data's availability and increased statistical reliability for less populated areas and small population subgroups. Population data reflect the total population (rather than the adult population), as the total population is served by the workforce.

Because not all boards have data available for all years, it is necessary to impute data for missing years to calculate average annual percent change. The average of the year preceding and following the missing year was used for the imputed value.

Data were analyzed and tabulated with SAS 9.4; graphics were produced in Excel and Tableau 2022.

Race, Ethnicity, Language, and Disability (REALD) demographic information:

Race & ethnicity: Both "parent" category and subgroup race/ethnicity categories in the workforce data were collected and analyzed using REALD procedures and methodology, as outlined in the REALD Implementation Guide. In brief, survey respondents were first asked an open-response question about how they identify their race, ethnicity, tribal affiliation, country of origin, or ancestry (this open text identification was collected but not processed for use in this report). Respondents then selected all categories that apply from a list of 41 racial or ethnic identities (see full form here). If a single category was selected, the respondent was assigned to that race/ethnicity category for data analysis. If more than one category was selected, respondents could indicate if they thought of one category as their primary racial or ethnic identity and they were assigned to the indicated primary race/ethnicity category for analysis. If no primary racial or ethnic identity was indicated but multiple race/ethnicity categories were selected, race/ethnicity category was assigned using the "rarest race first" methodology as described on page 94 of the Implementation Guide.

In order to compare health care workforce data to the Oregon population, statewide population estimates were created from American Community Survey (ACS) Public Use Microdata Sample (PUMS) by the OHA Equity and Inclusion Division using the protocol described beginning on page 94 of the Implementation Guide.

Language: Survey respondents were asked if they speak languages other than English. If the response was "yes", the individual could then select up to two languages that they speak other than English. Respondents also provided their proficiency

REALD Race/Ethnicity Reporting Categories	
Parent Group	**Subgroup**
American Indian or Alaska Native	American Indian
	Alaska Native Canadian Inuit, Métis or First Nation
	Indigenous Mexican, Central or South American
Asian	Asian Indian
	Cambodian
	Communities of Myanmar
	Chinese
	Filipino/a
	Hmong
	Japanese
	Korean
	Laotian
	South Asian
	Vietnamese
	Other Asian
Black or African American	African
	African American
	Afro-Caribbean
	Ethiopian
	Other African (Black)
	Other Black
Native Hawaiian or Pacific Islander	Guamanian or Chamorro Communities of the Micronesian Region
	Native Hawaiian
	Samoan
	Marshallese
	Other Pacific Islander
Middle Eastern/ North African	Middle Eastern
	North African
White	Slavic
	Eastern European
	Western European
	Other White
Hispanic or Latino/a/x	Mexican
	Central American
	South American
	Other Hispanic or Latinx

level, if they had received training in medical terminology in the selected language(s), if they use the language(s) while providing patient care, and if they are certified as a bilingual provider or medical interpreter. All respondents were also asked about their English proficiency.

Disability: Survey respondents were asked if they experience functional difficulties, including difficulty hearing; seeing; walking or climbing stairs; concentrating, remembering or making decisions; dressing or bathing; learning how to do things; communicating; doing errands alone; or with mood, intense feelings, controlling their behavior, or experiencing delusions or hallucinations. Respondents who indicated "yes" to any of these were then asked at what age the condition began.

Specialty groups definitions

- **Primary care providers** include physicians and physician assistants who specialize in family practice, general practice, geriatric medicine, pediatrics, adolescent medicine, internal medicine, or obstetrics and gynecology; nurse practitioners who specialize in family practice, geriatrics, pediatrics, internal medicine, or obstetrics/gynecology/women's health; and naturopathic physicians who specialize in family medicine, pediatrics, geriatrics or obstetrics.

- **Behavioral health providers** include all psychologists, counselors and therapists, licensed clinical social workers, and clinical social work associates; physicians and physician assistants who specialize in psychiatry (addiction, neurology, child, adolescent, geriatric, or forensic) or psychoanalysis; nurse practitioners who specialize in psychiatry/mental health; and naturopathic physicians who specialize in mental health.

- **Oral health providers** include dentists who specialize in general dentistry, pediatric dentistry or public health; and expanded practice dental hygienists who specialize in general dentistry, pediatric dentistry or public health and who report holding an expanded practice permit.

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Suggested Citation

HEALTH POLICY AND ANALYTICS
Office of Health Analytics

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